



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RB412WA-CR&O-3-62-2A-

1-2

Job Sheet 170063



001227

Part No: RB412WA-CR&O-3-62-2A-1-2 Job Qty: 4 ea

Part Name: Blade Bolt Segments Removal / Installation Workaid



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/9/18

Job Tracking No:

Due Date: 1/26/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG RB412WA-CR&O-3-62-2A-1-2 Rev B IPP Rev A 18.01.08 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	4 Ea		1/25/18	0.00	0.00	Start Up Small Fab-2		MCC
110	Small Fab	4 pcs		1/26/18	0.00	0.80	Small Fab-3		MCC
120	QC	4 pcs		1/26/18	0.00	0.00	QC5		38
121	Outsource	4 pcs		1/26/18	0.00	0.00	Outsource13		AT 18/03/19
122	Packaging	4 pcs		1/26/18	0.00	0.00	Packaging2		AT 18/03/19
123	QC	4 pcs		1/26/18	0.00	0.00	QC6		38
130	Packaging	4 pcs		1/26/18	0.00	0.00	Packaging3-1		MAR 20 2018
140	QC21-SA	4 Ea		1/26/18	0.00	0.00	QC21		GA 139

Part Op 110 - Assemble as per DWG. Sheet 1, press fit dowel pin.

Descriptions: 121 - Issue P/O to Groupe Altech: P/O 035186 - Zinc plate, ASTM B633 TYPE 1 SC2 - Certificate of Conformity is required

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	98381A550 5021314	4	25	0	0
	RB412WA-CR&O-3-62-2A-1-2-2A	4	0	0	0

Part Specifications

Specifications could not be found.

Plex 1/9/18 7:10 AM Dart.lajeunesse.marie



Dart Aerospace Ltd.
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CANADA
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Email: sales@dartaero.com
www.dartaerospace.com

Container No: S046058



Part: RB412WA-CR&O-3-62-2A-1-2

Job No: 170063

Serial No/Batch: S046058

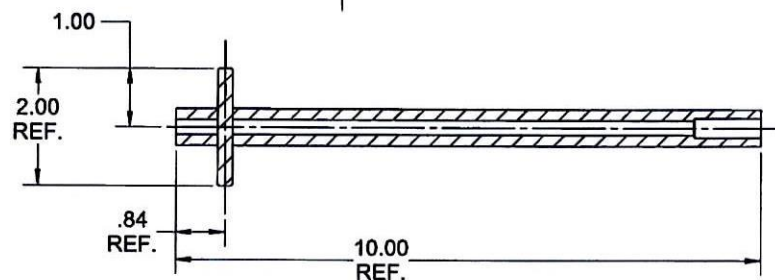
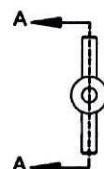
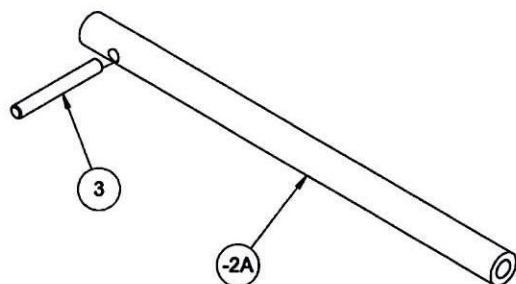
Revision: RB412WA-CR&O-3-62-2A-1-2

Inspector:

Date: 02/27/18

ITEM #	QTY	PART #	TITLE	PG
-2A	1	RB412WA-CR&O-3-62-2A-1-2A	TUBE	2
3	1	McMaster#98381A550	DOWEL PIN 1/4" DIA x 2" LG.	-

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
1	RELEASE FOR PRODUCTION	-	12/27/16	-	-
B	McM# ADDED FOR DOWEL PIN, McM# ADDED FOR -2A, TEMPLATE UPDATED	17-766	17.11.27	VM	WM



SECTION A-A

RB412WA-CR&O-3-62-2A-1-2 BLADE BOLT SEGMENTS REMOVAL / INSTALLATION WORKAID

NOTES:

- 1) MATERIAL: N/A
- 2) HEAT TREAT: N/A
- 3) FINISH: ZINC PLATE
- 4) SPEC: ASTM B633 TYPE I, SC 2
- 5) BREAK ALL SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A

SHOP COPY
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *770063 MWS*
18-01-09

DART AEROSPACE Hawkesbury, Ontario, Canada	
TITLE BLADE BOLT SEGMENTS REMOVAL / INSTALLATION WORKAID	
DWG NO. RB412WA-CR&O-3-62-2A-1-2	REV B
DESIGN BY: VM 11/27/2017	CHECKED BY: VM 11/27/2017
DRAWN BY: VM 11/27/2017	CHECKED BY: VM 11/27/2017
INFO. APPR: DD 11/30/2017	APPROVED: VM 12/01/2017
DATE: 11/27/2017	DATE: 12/01/2017
SCALE: NTS	WEIGHT: N/A
SHEET 1 OF 2	

1. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED
2. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
3. DIMENSIONAL LIMITS APPLY AFTER PLATING

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DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐	OTHER : _____			



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PURCHASE ORDER PO039186

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
6	170063	RB412WA-CR&O-3-62-2A-1-2	required Blade Bolt Segments Removal / Installation Workaid -Issue P/O to Groupe Altech: P/O _____ -Zinc plate, ASTM B633 TYPE 1 SC2 -Certificate of Conformity is required	Firmed	3/16/18	4 pcs	0 pcs	4 pcs	\$6.00/pcs	\$24.00
						✓ 4x	AT	18/03/19		
7	171450	RBW6405G02331-3G-05	Puller -Issue P/O to Groupe Altech: P/O _____ -Zinc plate, ASTM B633 TYPE 1 SC2 -Certificate of Conformity is required	Firmed	3/16/18	2 pcs	0 pcs	2 pcs	\$6.00/pcs	\$12.00
						✓ 2x	AT	18/03/19		
8	171449	RBW6405G02331-3G-07	Pin -Issue P/O to Groupe Altech: P/O _____ -Zinc plate, ASTM B633 TYPE 1 SC2 -Certificate of Conformity is required	Firmed	3/16/18	9 pcs	0 pcs	9 pcs	\$6.00/pcs	\$54.00
						✓ 9x	AT	18/03/19		
9	172466	RBE350A94-3700-C-01	Tube -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	3/16/18	9 pcs	0 pcs	9 pcs	\$1.80/pcs	\$16.20
						✓ 9x	AT	18/03/19		
10	171042	RBST1007-13	Secondary Seat -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	3/16/18	4 pcs	0 pcs	4 pcs	\$0.95/pcs	\$3.80
						✓ 4x	AT	18/03/19		
11	171709	RBT18603-1	Handle -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	3/16/18	5 pcs	0 pcs	5 pcs	\$2.25/pcs	\$11.25
						✓ 5x	AT	18/03/19		
12	171712	RBT18603-7	Foot -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	3/16/18	4 pcs	0 pcs	4 pcs	\$0.89/pcs	\$3.56
						✓ 4x	AT	18/03/19		



Certificat de Conformité / Certificate of Compliance



2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

007318- 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
16-Mar-2018		Celine Schreindorfer		P0039186				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
2	RBE2-10-1-01 Rev.	RBE2-10-1-01 01 - BLACK OXIDE ON SST MIL-C-13964, CLASS 1; MIL-C-16173 GRADE 4	BLACK-OXIDE CH	6	6	0	0	0
3	RBE350A93-3303-02-1 Rev.	RBE350A93-3303-02-1 01 - BLACK OXIDE FINISH M MIL-C-13924C, CLASS 1	BLACK-OXIDE CH	6	6	0	0	0
4	RBE350A93-3303-02-3 Rev.	RBE350A93-3303-02-3 01 - BLACK OXIDE FINISH ON SST MIL-C-13942C, CLASS 1	BLACK-OXIDE CH	6	6	0	0	0
5	RBE350A93-3317-20 Rev.	RBE350A93-3317-20 01 - BLACK OXIDE FINISH ON SST MIL-C-13924C, CLASS 1	BLACK-OXIDE CH	6	6	0	0	0
6	RB412WA-CR&O-3-62-2A-1-2 Rev.	RB412WA-CR&O-3-62-2A-1-2 ASTM B633 TYPE 1 SC2 01 - ZINC-CLEAR TRI [ZINC CLEAR TRIVALENT]	ZINC CH	✓ 4	4	0	0	0
7	RBW6405G02331-3G-05 Rev.	RBW6405G02331-3G-05 ON SST MIL-C-13924C, CLASS 1 01 - ZINC-CLEAR TRI [ZINC CLEAR TRIVALENT]	ZINC CH	✓ 2	2	0	0	0
8	RBW6405G02331-3G-07 Rev.	RBW6405G02331-3G-07 ASTM B633 TYPE 1 SC2 01 - ZINC-CLEAR TRI [ZINC CLEAR TRIVALENT]	ZINC CH	✓ 9	9	0	0	0
10	RBST1007-13 Rev.	RBST1007-13 01 - BLACK OXIDE ON SST MIL-C-13924C CLASS 1	BLACK-OXIDE CH	4	4	0	0	0
11	RBT18603-01 Rev.	RBT18603-01 01 - BLACK OXIDE ON SST MIL-DTL-13924C CLASS 1	BLACK-OXIDE CH	5	5	0	0	0
12	RBT18603-07 Rev.	RBT18603-07 01 - BLACK OXIDE ON SST MIL-DTL-13924C CLASS 1	BLACK-OXIDE CH	4	4	0	0	0
13	RBST1007-11 Rev.	RBST1007-11 01 - BLACK OXIDE ON SST MIL-C-13924C CLASS 1	BLACK-OXIDE CH	4	4	0	0	0
9. RBE350A94-3700-C-01				9	9			

007318-1

007318- 1

BUYER:

Date expédition Ship date		Créé Par Generated By		Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.						
16-Mar-2018		Celine Schreindorfer				PO039186						
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #		Description pièce(s)		CATG. U/M	Quantités / Quantities Comm. / Exp. / Qté NC / /Ordered / Shipped / NC Qty				Qté Qty	Qté Scrapp	À venir / Back Order

Notes Additionnelles / Additional Notes

Réçu par
Received By

Page 2 of 2